SOLAR'S MOST TRUSTED



REC ALPHA® PURE-RX SERIES

DATASHEET



450 - 470W HETEROJUNCTION TECHNOLOGY 22.6% EFFICIENCY

>92% POWER IN YEAR 25

-0.24%/K TEMPERATURE COEFFICIENT OF PMAX



ELIGIBLE

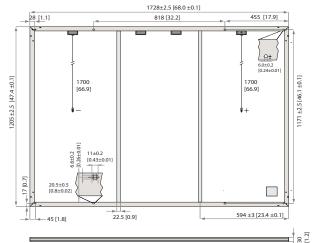
REC ALPHA® PURE-RX SERIES DATASHEET



Measurements in [inches] and mm

Specifications subject to change without notice.

GENERAL DAT	ГА
Cell Type	88 half-cut bifacial REC heterojunction cells,
	with gapless technology
Glass	0.13 in solar glass with anti-reflective surface treatment
	in accordance with EN12150
Backsheet	Highly resistant polymer (Black)
Frame	Anodized aluminum (Black)
Junction Box	4-part, 4 bypass diodes,
	IP68 rated, in accordance with IEC 62790:2020
Connectors	Stäubli MC4 PV-KBT4/KST4 (12 AWG)
	in accordance with IEC 62852:2014, IP68 only when connected
Cable	12 AWG solar cable, 66.9 in (1.70 m) + 66.9 in (1.70 m)
	in accordance with EN50618:2014
Dimensions	68.0 x 47.4 x 1.2 in (22.4 ft²) / 1728 x 1205 x 30 mm (2.08 m²)
Weight	50.0 lb / 22.7 kg
Origin	Made in Singapore



ELECTRICAL DATA PRODUCT CODE*: RECXXX			RE-RX
Power Output - P _{MAX} (WP)	450	460	470
Watt Class Sorting - (W)	0/+10	0/+10	0/+10
Nominal Power Voltage - $V_{MPP}(V)$	54.3	54.9	55.4
Nominal Power Current - $I_{MPP}(A)$	8.29	8.38	8.49
Open Circuit Voltage - $V_{OC}(V)$	65.6	65.8	65.9
Short Circuit Current - $I_{SC}(A)$	8.81	8.88	8.95
Power Density (W/ft²)	20.1	20.5	21.0
Panel Efficiency (%)	21.6	22.1	22.6
Power Output - $P_{MAX}(W_p)$	343	350	358
Nominal Power Voltage - V_{MPP} (V)	51.2	51.7	52.2
Nominal Power Current - I _{MPP} (A)	6.70	6.77	6.86
Open Circuit Voltage - $V_{OC}(V)$	61.8	62.0	62.1

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of P_{MAXV}, V_{CC} & I_{Cx} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s). *Where xxx indicates the nominal power class (P_{MAX}) at STC above.

MODULE RATINGS	
Module Operating Temperature [T98] _s	158°F (70°C)
Min. Environmental Temperature	-40°F (-40°C)
System Voltage	1000 V
Maximum Test Load (4 Point Mounting, Front)*	+7000 Pa (1.02 lbs/in²)
Maximum Test Load (4 Point Mounting, Rear)*	-4000 Pa (0.58 lbs/in²)
Maximum Test Load (6 Point Mounting, Front)**	+8000 Pa (1.16 lbs/in²)
Maximum Test Load (6 Point Mounting, Rear)**	-6000 Pa (0.87 lbs/in²)
Max Series Fuse Rating	25 A
Max Reverse Current	25 A

Design load = Test load / 1.5 (safety factor) § 98th percentile operating temperature * IEC61730/UL61730 certified. Refer to installation manual. **Internal testing. Refer to installation manual.

TEMPERATURE RATINGS*	
Nominal Module Operating Temperature	44 ± 2°C
Temperature coefficient of P _{MAX}	-0.24%/K
Temperature coefficient of V _{oc}	-0.24%/K
Temperature coefficient of I _{sc}	0.04%/K
*The temperature coefficients stated are linear values	

DELIVERY INFORMATION Panels per Pallet Panels per 40 ft GP/high cube 594 (18 Pallets) container 792 (24 Pallets) Panels per 53 ft truck

Available from:

STC

Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

CERTIFICATIONS

ISO 14001; ISO 9001	l; IEC45001; IEC62941		
IEC 61215:2021;IEC 61730:2023;UL 61730			
ISO 11925-2	Ignitability (EN 13501-1 Class E)		
IEC 62716	Ammonia Resistance		
IEC 61701	Salt Mist (SM6)		
IEC 61215:2016	Hailstone (35mm)		
UL 61730	Fire Type 2		







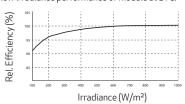


WARRANTY			
	Standard	REC ProTrust	
Installed by an REC	No	Yes	Yes
Certified Professional			
System Size	All	<25 kW	25-500
			kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%

REC ProTrust Warranty applies only for i) REC panels installed by an REC Certified Solar Professional, and ii) panels have been registered by the installer with REC. Subject to System Size and further conditions. See www.recgroup.com for details.

LOW LIGHT BEHAVIOR

Typical low irradiance performance of module at STC:



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